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Magnetic and dielectric properties of o-LuFeO3/SrTiO3

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Abstract

© 2016 Published under licence by IOP Publishing Ltd. Here we present the investigation of the orthorhombic o-LuFeO 3 thin film grown on SrTiO 3 (001) substrate. Temperature dependencies of magnetization measured in magnetic fields 1000 Oe and 2000 Oe were described in the assumption that ferromagnetic correlated regions are presented in samples together with the paramagnetic phase. Additional argument in favor of the ferromagnetic regions existence in o-LuFeO 3 is the magnetic hysteresis curve measured at T=5 and 100K. The temperature dependences of dielectric response were measured and analyzed.

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